Claims

- [c1]

 1. An apparatus comprising:

 a cap including an aperture and configured to allow an electron to pass along an electron path through the aperture; and

 a cover assembly including a cover adjacent to the aperture, wherein the cover is configured to lie along the electron path during at least one point in time.
- [c2] 2. The apparatus of claim 1, wherein the cover assembly further comprises means for displacing the cover.
- [c3] 3. The apparatus of claim 1, wherein the cover assembly further comprises a spring.
- [c4] 4. The apparatus of claim 3, wherein the spring comprises stainless steel.
- [c5] 5. The apparatus of claim 3, wherein the cover assembly further comprises means for releasing the spring.
 - 6. The apparatus of claim 3, wherein the cover assembly further comprises a material comprising an end, wherein the end is fastened to the spring.
 - 7. The apparatus of claim 6, wherein the material is configured to release the spring when a sufficient amount of an electrical current is passed through the material.
- [c8] 8. The apparatus of claim 1, wherein the cover assembly comprises an actuator.
- [c9] 9. The apparatus of claim 1, wherein the cover assembly further comprises a cover guide in contact with the cover.
- [c10] 10. The apparatus of claim 1, wherein the cover comprises stainless steel.
- [c11] 11. The apparatus of claim 1, wherein the cover comprises an insulator.
- 12. An electron gun comprising:

 a cap assembly comprising a cap, a cap aperture, a cover, and a spring,
 wherein:

 the cover overlies the cap aperture during at least one point in time; and

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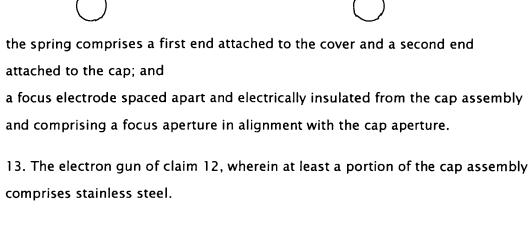
[c6]

[c7]

[c12]

[c13]

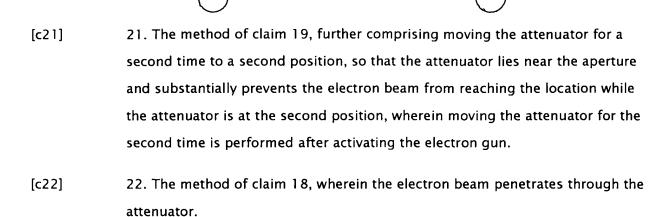
[c17]



- [c14] 14. The electron gun of claim 12, wherein the cover comprises stainless steel.
- [c15] 15. The electron gun of claim 12, wherein the cover comprises an insulator.
- [c16] 16. The electron gun of claim 12, wherein the cap further comprises a cover guide in contact with the cover.
 - 17. A method of using a tube comprising:

 placing at least a portion of an electron gun within a first end of the tube,
 wherein the electron gun comprises:
 a cap including an aperture; and
 an attenuator assembly including an attenuator adjacent to the aperture,
 wherein the attenuator lies along a path for an electron beam within the
 electron gun when the electron is activated;
 flowing a gas at least near a portion of the electron gun while the attenuator
 blocks the aperture; and
 sealing the tube.
- [c18] 18. The method of claim 17, further comprising activating the electron gun to generate the electron beam that passes through the aperture.
- [c19] 19. The method of claim 18, further comprising moving the attenuator for a first time to a first position, so that the electron beam can pass through the aperture to a location near a second end of the tube that is opposite the first end.
- [c20] 20. The method of claim 19, wherein moving the attenuator for the first time permanently moves the attenuator such that it no longer ever blocks the path.

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- [c23] 23. The method of claim 17, wherein flowing the gas comprises evacuating the tube.
- [c24] 24. The method of claim 17, wherein the electron gun is an electron gun.
- [c25] 25. The method of claim 17, further comprising activating a circuit to move the attenuator to expose at least a portion of the aperture after sealing the tube.
- [c26] 26. The method of claim 25, wherein activating the circuit blows a fuse coupled to the cover.